

### **REMARKS and ARGUMENTS**

The present application was filed on November 15, 2001 with claims 1 - 42. Claims 19, 38, 40, and 42 have been cancelled. By this amendment, claims 3, 4, 13, 14, 32, and 33 have been amended. Reconsideration is requested.

#### **Claim Objections**

Claims 3-5 were objected to because of informalities leading to a lack of antecedent basis. Claims 3 and 4 have been amended to address the informalities. The amendment of Claim 4 now provides antecedent basis for the examiner's objection to Claim 5.

#### **Claim Rejections - 35 USC § 102**

Claims 1 - 12, 19 - 31, and 38 - 42 were rejected under 35 USC §102(b) as being anticipated by *Otsuka et al.* '797. Claims 19, 38, 40 and 42 have been cancelled, as mentioned hereinabove. Applicant respectfully traverses the rejection of claims 1 - 12, 20 - 31, 39 and 41, in view of *Otsuka et al.* '797.

Claim 1 of the instant invention sets forth a method for fuel driveability index detection. In contradistinction to the present invention, *Otsuka et al.* '797 does not teach or suggest fuel driveability index detection. The invention of *Otsuka et al.* '797 is related to an air/fuel ratio feedback control system for performing feedback control of the air/fuel ratio of an air/fuel mixture being supplied to an internal combustion engine. (See Col. 1, Lines 7-10). A typical oxygen sensor comprises an electrochemical cell that generates an electromotive force as a function of partial pressure of oxygen in exhaust gas compared to a reference gas (See Paragraph 0005). Air/fuel ratio may be inferred from the electromotive force output of the sensor, as is known to one skilled in the art. The instant invention describes fuel driveability index detection, using electromotive force output of the sensor. Fuel driveability index is a characteristic of fuel, and is distinguishable from air/fuel ratio, as is known to one skilled in the art. (See, also paragraphs 0001 and 0002 of the instant application.) For this reason, applicant respectfully asserts that claim 1 of the present invention is patentably distinguishable from *Otsuka et al.* '797

Applicant respectfully asserts that claims 20, 39, and 41 are patentably distinguishable from *Otsuka et al.* '977 for the same reasons as set forth with respect to claim 1. Therefore, applicant respectfully requests reconsideration of claims 20, 39, and 41.

Applicant respectfully asserts that claims 2 and 21 are patentably distinguishable from *Otsuka et al.* '977 for the same reasons as set forth with respect to claim 1. Therefore, applicant respectfully requests reconsideration of claims 2 and 21.

Claim 3 of the instant invention sets forth a method for fuel driveability index detection, comprising, *inter alia*, adjusting open loop fueling within about five seconds of a cold start of an engine. *Otsuka et al.* '797 does not teach or suggest adjusting open loop fueling within about five seconds of a cold start of an engine. In contrast to the invention described in Claim 3, *Otsuka et al.* '797 teaches monitoring the condition of activation of the O<sub>2</sub> sensor, etc., to determine whether the engine is in a condition for initiation of air/fuel ratio control. It is requisite that the O<sub>2</sub> sensor is fully activated and the engine is in a warmed-up condition before initiation of air/fuel ratio control (Col. 5, Lines 7 – 13). Furthermore, air/fuel ratio control is not initiated until after the sensor produces an activation signal, and a timer finishes counting for a predetermined period of time, described in the order of magnitude of one minute (Col. 5, Lines 24 – 30). Therefore, claim 3 is patentably distinguishable from *Otsuka et al.* '797.

Applicant respectfully asserts that claim 22 is patentably distinguishable from *Otsuka et al.* '977 for the same reasons as set forth with respect to claim 3. Therefore, applicant respectfully requests reconsideration of claim 22.

Claims 4-12 are ultimately dependent upon allowable claims 1 and 2. Therefore, applicant respectfully requests reconsideration of claims 4-12.

**Allowable Subject Matter**

The examiner stated that claims 13 – 18 and 32 – 37 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Acknowledgement of allowable subject matter is noted with appreciation.

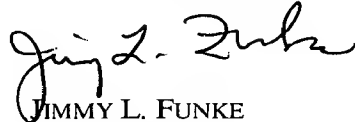
Claims 13 and 14 have been amended to include the limitations of the base claim and any intervening claims. Reconsideration of now allowable claims 13 and 14 is respectfully requested. Claims 15 – 18 are ultimately dependent upon now allowable claim 14. Reconsideration of claims 15 – 18 is respectfully requested.

Claims 32 and 33 have been amended to include the limitations of the base claim and any intervening claims. Reconsideration of now allowable claims 32 and 33 is respectfully requested. Claims 34 – 38 are ultimately dependent upon now allowable claim 33. Reconsideration of claims 34 – 38 is respectfully requested.

**Conclusion**

For all of the above reasons, claims 1 – 18, 20 – 37, 39, and 41 are patentably distinguishable over the prior art cited thereagainst. Reconsideration and allowance is respectfully requested. A Notice of Allowance is earnestly solicited. If the Examiner believes that a telephone interview would be beneficial, please contact the undersigned at the number listed. Please charge any necessary fees, including any extension of time, or any other fee deficiencies to Delphi Technologies, Inc., Deposit Account No. 50-0831.

Respectfully submitted,



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